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## (54) Control system for supercharged engine

(57) A control system for an engine which is equipped with a turbosupercharger having variable vanes forming variable opening nozzle relative to a turbine and an exhaust gas recirculation device controls the variable vanes and an exhaust gas recirculation valve such that, while regulating an vane opening in a

specified range of partial vane opening in regions of engine operating conditions wherein exhaust gas recirculation is conducted, feedback controls the exhaust gas recirculation valve so as to converge an air-to-fuel ratio at a target ratio.

FIG. 1

